

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-44. (canceled).

45. (currently amended) A computer implemented method for server-side execution in support of financial transactions, comprising:

establishing an authentication record in memory accessible by server-side computer resources, in response to communications at a first time from a particular account holder, for a predicted transaction by the particular account holder, the authentication record for the predicted transaction includes a predicted transaction amount, a transaction time parameter, and an authenticated transaction signature for presentation upon execution of the predicted transaction, and sending a message including the authenticated transaction signature from the server-side computer resources to the particular account holder;

establishing an authorization record in memory accessible by server-side computer resources, in response to communications at a second time from a party to a particular transaction, for the particular transaction indicating an actual transaction amount, an actual transaction time and a presented transaction signature, wherein said establishing an authorization record does not require identification of the particular account holder;

reading and processing the authorization record and the authentication record in the server-side computer resources, and if the presented transaction signature in the authorization record matches the authenticated transaction signature in the authentication record for the predicted transaction, the actual transaction amount in the authorization record matches the predicted transaction amount in the authentication record and the actual transaction time in the authorization record matches the transaction time parameter in the authentication record, then sending an authorization message to the party of the particular transaction; and

performing an accounting process, including reconciling the predicted transaction amount and the actual transaction amount in the server-side computer resources, for the particular account holder.

- 1 46. (original) The method of claim 45, including:
2 storing the authentication record in a database including a plurality of authentication
3 records for other predicted transactions.
- 1 47. (previously presented) The method of claim 45, wherein the time parameter comprises a time
2 value indicating the first time, when the authorization record was created.
- 1 48. (original) The method of claim 45, wherein said matching includes determining whether the
2 actual transaction time falls within a time interval indicated by the transaction time parameter.
- 1 49. (previously presented) The method of claim 45, wherein establishing an authentication record
2 includes:
3 establishing a communication session with the particular account holder;
4 accepting an account number and an identification number for the particular account
5 holder via the communication session;
6 accepting the predicted transaction amount via the communication session; and
7 producing the transaction signature.
- 1 50. (original) The method of claim 49, including prompting the particular account holder to
2 supply a combination of digits from a personal identification code, wherein the combination does
3 not include all of the personal identification code.
- 1 51. (previously presented) The method of claim 45, wherein establishing an authorization record
2 includes:
3 establishing a communication session with the party to the particular transaction; and
4 accepting the presented transaction signature and the actual transaction amount via the
5 communication session.
- 1 52. (previously presented) The method of claim 51, including accepting identification of the
2 party via the communication session.

1 53. (previously presented) The method of claim 52, including maintaining a list of authorized
2 parties, and including determining whether the identification of the party accepted via the
3 communication session indicates a party in the list of authorized parties.

1 54. (canceled).

1 55. (previously presented) The method of claim 45, wherein establishing an authentication record
2 includes:

3 establishing a communication session with the particular account holder;
4 accepting an account number via the communication session;
5 prompting the particular account holder via the communication session to supply a static
6 identification number and a dynamically identified combination of digits from a personal
7 identification code, wherein the combination does not include all of the personal identification
8 code;

9 accepting the predicted transaction amount via the communication session; and
10 producing the transaction signature and sending the transaction signature to the particular
11 account holder.

1 56-57. (canceled).

1 58. (currently amended) A method for managing financial transactions using a computer system
2 arranged for communication with remote devices using communication lines, comprising:

3 performing a plurality of authentication processes in response to initiations of respective
4 sessions with the computer system by data communications from remote devices, for predicted
5 transactions having predicted transaction amounts and predicted transaction time out intervals by
6 particular account holders, the authentication processes respectively characterized by the steps
7 of:

8 generating in the computer system requests for input for the corresponding
9 predicted transaction, and receiving in the computer responses to the
10 requests for input from one of said remote devices, wherein said
11 responses to the requests include an identifier of the account used for
12 authenticating the account, at least one ~~factor~~ parameter unique to the

13 account holder for authenticating the account holder and at least two
14 ~~factors~~ parameters related to the predicted transaction including a
15 transaction specific ~~factor~~ parameter and a transaction type identifier
16 unique to the account holder used for authenticating the predicted
17 transaction;
18 storing a first time-stamped record in memory including the identifier of the
19 account, the at least one ~~factor~~ parameter unique to the account holder,
20 the transaction specific ~~factor~~ parameter, the transaction type identifier
21 and a time parameter as a part of or as data associated with the first
22 record in memory; and
23 producing a transaction signature as a function of the identifier of the account,
24 the at least one ~~factor~~ parameter unique to the account holder, the
25 transaction specific ~~factor~~ parameter, the transaction type identifier and
26 the time parameter, for presentation upon execution of the predicted
27 transaction upon authenticating the account, the account holder and the
28 predicted transaction using said responses, associating the transaction
29 signature with the first time-stamped record and transmitting the
30 transaction signature to one of said remote devices associated with the
31 particular account holder;
32 performing, in the computer system, a plurality of authorization processes for particular
33 transactions in response to authorization requests from parties to actual transactions, the
34 authorization process for a particular transaction characterized by the steps of
35 receiving an account identifier, a presented transaction signature, and an actual
36 transaction amount at an actual transaction time associated with the
37 authorization request for the particular transaction having a transaction
38 type from one of said remote devices;
39 storing a second time-stamped record in memory for the authorization request
40 for the particular transaction, the record including the received account
41 identifier, the presented transaction signature, the actual transaction
42 amount and the actual transaction time;
43 processing the second time-stamped record, in response to one of said first
44 time-stamped records with a matching account identifier, to verify that

the presented transaction signature matches the transaction signature associated with said one of said first records, the actual transaction amount matches the predicted transaction amount associated with said one of said first time-stamped records, the actual transaction type matches the transaction type associated with said one of said first records and the actual transaction time is within the predicted transaction time out interval; and transmitting authorization signals upon successful authorization to one of said remote devices associated with said particular transaction; and performing, in the computer system, a plurality of accounting processes for the respective transactions subject of authorization processes, including reconciling the predicted transaction amounts and the actual transaction amounts for each transaction of the particular account holders.

59. (previously presented) The method of claim 58, including:

storing the predicted transaction type identifier, the predicted transaction amount, and the transaction signature for a predicted transaction in a database in said memory.

60. (previously presented) The method of claim 58, including storing a predicted transaction time out interval parameter in the database.

61. (previously presented) The method of claim 58, including setting up a time out interval between the authentication process and the authorization process and after creation of a first time-stamped record for a particular account, monitoring the memory to detect creation of a second time-stamped record having a matching account identifier and attempting said authorization process until one of expiration of the time out interval and success of the authorization process.

62. (previously presented) The method of claim 58, wherein the authentication process is further characterized by executing a process in the computer system prompting the particular account holder via the communication lines to supply to the computer system a transaction specific code based on or equal to a combination of alphanumeric characters at certain randomly chosen

5 alphanumeric character positions in a password, wherein the combination does not include all of
6 the alphanumeric characters in the password.

1 63. (previously presented) The method of claim 58, wherein the authorization process includes:
2 at the server, performing a plurality of authorization processes for particular transactions
3 in response to authorization requests from parties to actual transactions characterized by
4 prioritizing pairs of first time-stamped records and second time-stamped records with matching
5 account identifiers according to their time stamps and time out interval parameters.

1 64. (previously presented) The method of claim 58, including accepting identification of the
2 party at the server.

1 65. (previously presented) The method of claim 58, wherein the authorization process operates
2 without identification of the particular account holder to the party.

1 66. (previously presented) The method of claim 58, wherein the authorization process operates
2 with identification of the particular account holder to the party.

1 67. (currently amended) A financial transaction server, comprising:
2 a communication interface;
3 a computer system including memory coupled to the communication interface, the data
4 processing system including resources for managing financial transactions and for
5 communicating using the communication interface with remote devices, including
6 an authentication process communicating over the communication interface for
7 authenticating a predicted transaction by a particular account holder, including routines
8 characterized by the steps of:
9 generating in the computer system requests for input for the corresponding
10 predicted transaction, and receiving in the computer responses to the
11 requests for input from one of said remote devices, wherein said
12 responses to the requests include an identifier of the account used for
13 authenticating the account, at least one ~~factor~~ parameter unique to the
14 account holder for authenticating the account holder and at least two

~~factors~~ parameters related to the predicted transaction including a transaction specific ~~factor~~ parameter and a transaction type identifier unique to the account holder used for authenticating the predicted transaction;

storing a first time-stamped record in memory including the identifier of the account, at least one ~~factor~~ parameter unique to the account holder for authenticating the account holder, the transaction specific ~~factor~~ parameter, the transaction type identifier and a time parameter as a part of or as data associated with the first record in memory; and

producing a transaction signature as a function of the identifier of the account, the at least one ~~factor~~ parameter unique to the account holder, the transaction specific ~~factor~~ parameter, the transaction type identifier and the time parameter, for presentation upon execution of the predicted transaction upon authenticating the account, the account holder and the predicted transaction using said responses, associating the transaction signature with the first time-stamped record and transmitting the transaction signature to one of said remote devices associated with the particular account holder;

an authorization process communicating over the communication interface for authorizing a particular transaction having an actual transaction amount and an actual transaction time, including routines characterized by the steps of:

receiving an account identifier, a presented transaction signature, and an actual transaction amount at an actual transaction time associated with the authorization request for the particular transaction having a transaction type from one of said remote devices;

storing a second time-stamped record in memory for the authorization request for the particular transaction, the record including the received account identifier, the presented transaction signature, the actual transaction amount and the actual transaction time;

processing the second time-stamped record, in response to one of said first time-stamped records with a matching account identifier, to verify that the presented transaction signature matches the transaction signature

47 associated with said one of said first records, the actual transaction
 48 amount matches the predicted transaction amount associated with said
 49 one of said first time-stamped records, the actual transaction type
 50 matches the transaction type associated with said one of said first
 51 records and the actual transaction time is within the predicted
 52 transaction time out interval; and
 53 transmitting authorization signals upon successful authorization to one of said
 54 remote devices associated with said particular transaction; and
 55 an accounting process executed in combination with said authorization processes for
 56 respective transactions, including reconciling the predicted transaction amounts and the actual
 57 transaction amounts for each transaction of the particular account holders.

1 68. (previously presented) The financial transaction server of claim 67, wherein the data
 2 processing system includes a local or remote database storing the first and second time-stamped
 3 records.

1 69. (previously presented) The financial transaction server of claim 67, wherein the data
 2 processing system includes a watchdog routine which after creation of a first time-stamped
 3 record for a particular account, monitors the memory to detect creation of a second time-stamped
 4 record having a matching account identifier and attempts said authorization process until one of
 5 expiration of the time out interval and success of the authorization process.

1 70. (previously presented) The financial transaction server of claim 67, wherein the
 2 authentication process includes routines performing a plurality of authorization processes for
 3 particular transactions in response to authorization requests from parties to actual transactions
 4 characterized by prioritizing pairs of first time-stamped records and second time-stamped records
 5 with matching account identifiers according to their time stamps and time out interval
 6 parameters.

1 71. (previously presented) The financial transaction server of claim 67, wherein the
 2 authentication process includes a routine prompting the particular account holder via the
 3 communication interface to supply to the computer system a transaction specific code based on

4 or equal to a combination of alphanumeric characters at certain randomly chosen alphanumeric
 5 character positions in a password, wherein the combination does not include all of the
 6 alphanumeric characters in the password.

1 72. (previously presented) The financial transaction server of claim 67, wherein the authorization
 2 process includes a routine accepting identification of the party at the server.

1 73. (previously presented) The financial transaction server of claim 67, wherein the authorization
 2 process operates without identification of the particular account holder to the party.

1 74. (previously presented) The financial transaction server of claim 67, wherein the authorization
 2 process operates with identification of the particular account holder to the party.

1 75. (currently amended) An article of manufacture, comprising:
 2 a machine readable storage medium;
 3 a computer program stored on said machine readable medium with resources executable
 4 by a computer system for managing financial transactions, including
 5 an authentication process communicating over the communication interface for
 6 authenticating predicted transaction by a particular account holder, including routines
 7 characterized by the steps of:
 8 generating in the computer system requests for input for the corresponding
 9 predicted transaction, and receiving in the computer responses to the
 10 requests for input from one of said remote devices, wherein said
 11 responses to the requests include an identifier of the account used for
 12 authenticating the account, at least one ~~factor~~ parameter unique to the
 13 account holder for authenticating the account holder and at least two
 14 ~~factors~~ parameters related to the predicted transaction including a
 15 transaction specific ~~factor~~ parameter and a transaction type identifier
 16 unique to the account holder used for authenticating the predicted
 17 transaction;
 18 storing a first time-stamped record in memory including the identifier of the
 19 account, at least one ~~factor~~ parameter unique to the account holder for

20 authenticating the account holder, the transaction specific ~~factor~~
21 parameter, the transaction type identifier and a time parameter as a part
22 of or as data associated with the first record in memory; and
23 producing a transaction signature as a function of the identifier of the account,
24 the at least one ~~factor~~ parameter unique to the account holder, the
25 transaction specific ~~factor~~ parameter, the transaction type identifier and
26 the time parameter, for presentation upon execution of the predicted
27 transaction upon authenticating the account, the account holder and the
28 predicted transaction using said responses, associating the transaction
29 signature with the first time-stamped record and transmitting the
30 transaction signature to one of said remote devices associated with the
31 particular account holder;
32 an authorization process communicating over the communication interface for
33 authorizing a particular transaction having an actual transaction amount and an actual transaction
34 time, including routines characterized by the steps of
35 receiving an account identifier, a presented transaction signature, and an actual
36 transaction amount at an actual transaction time associated with the
37 authorization request for the particular transaction having a transaction
38 type from one of said remote devices;
39 storing a second time-stamped record in memory for the authorization request
40 for the particular transaction, the record including the received account
41 identifier, the presented transaction signature, the actual transaction
42 amount and the actual transaction time;
43 processing the second time-stamped record, in response to one of said first
44 time-stamped records with a matching account identifier, to verify that
45 the presented transaction signature matches the transaction signature
46 associated with said one of said first records, the actual transaction
47 amount matches the predicted transaction amount associated with said
48 one of said first time-stamped records, the actual transaction type
49 matches the transaction type associated with said one of said first
50 records and the actual transaction time is within the predicted
51 transaction time out interval; and

transmitting authorization signals upon successful authorization to one of said remote devices associated with said particular transaction; and an accounting process executed in combination with said authorization processes for the respective transactions, including reconciling the predicted transaction amounts and the actual transaction amounts for each transaction of the particular account holders.

76. (previously presented) The article of claim 75, wherein the resources include a routine for storing the first and second time-stamped records in a local or remote database.

77. (previously presented) The article of claim 75, wherein the resources include a watchdog routine which after creation of a first record for a particular account, monitors the memory to detect creation of a second record having a matching account identifier and attempts said authorization process until one of expiration of the time out interval and success of the authorization process.

78. (previously presented) The article of claim 75, wherein the authentication process includes a routine prompting the particular account holder via the communication interface to supply to the computer system a transaction specific code based on or equal to a combination of alphanumeric characters at certain randomly chosen alphanumeric character positions in a password, wherein the combination does not include all of the alphanumeric characters in the password.

79. (previously presented) The article of claim 75, wherein the authorization process includes routines performing a plurality of authorization processes for particular transactions in response to authorization requests from parties to actual transactions characterized by prioritizing pairs of first time-stamped records and second time-stamped records with matching account identifiers according to their time stamps and time out interval parameters

80. (previously presented) The article of claim 75, wherein the authorization process includes a routine accepting identification of the party at the server.

81. (previously presented) The article of claim 75, wherein the authorization process operates without identification of the particular account holder to the party.

- 1 82. (previously presented) The article of claim 75, wherein the authorization process operates
- 2 with identification of the particular account holder to the party.